

## Space Power Facility Horn Room Taking Shape

As part of an ongoing renovation at the Space Power Facility, the world's largest environmental simulation chamber that is located in Sandusky, Ohio, 90 cubic yards of a special mixture of self-consolidating concrete were poured to a height of 15.5 feet in the RATF (Reverberant Acoustic Test Facility). This first vertical wall segment begins creation of the 'horn room,' a room containing 36 nitrogen-driven acoustic modulators with horns to create overall sound pressure levels of 163 dBA (decibels adjusted) in the adjacent 101,500 cubic foot reverberant chamber. The RATF is one of two new test facilities under construction — the other is the Mechanical Vibration Facility (MVF), a three-axis servo-hydraulic shaker table. The two facilities will test the Orion Crew Exploration Vehicle and other spacecraft with simulated vibro-acoustic loads that are experienced during launch and supersonic ascent conditions.



During the pour, workers checked the depth of the concrete and inspected progress by using hand held spotlights to see how the concrete was filling the construction forms.

